

# How Industries Differ: An Overview

The U.S. economy is comprised of industries with diverse characteristics. For each industry covered in the *Career Guide* detailed information is provided about specific characteristics: the nature of the industry, working conditions, employment, occupational composition, training and advancement requirements, earnings, and job outlook. This chapter provides an overview of these characteristics for the economy as a whole.

## Nature of the Industry

Industries are defined by the goods and services the industry provides. Because workers in the United States produce such a wide variety of products and services, industries in the U.S. economy range widely, from aerospace manufacturing to motion picture production. Although many of these industries are related, each industry contains a unique combination of occupations, production techniques, and business characteristics. Understanding the nature of the industry is important, because it is this unique combination that determines working conditions, educational requirements, and the job outlook for each of the industries discussed in the *Career Guide*.

Industries are comprised of many different places of work, called *establishments*, which range from large factories and office complexes employing thousands of workers to small businesses employing only a few workers. Not to be confused with “companies,” which are legal entities, establishments are physical locations where people work, such as the branch office of a bank. Establishments that produce similar goods or services are grouped together into *industries*. Industries that produce related types of goods or services are, in turn, grouped together into *major industry divisions*. These are further grouped into the *goods-producing sector* (agriculture, forestry, and fishing; mining; construction; and manufacturing) or the *service-producing sector* (transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; services; and government).

Distinctions within industries are also varied. Each industry is comprised of a number of subdivisions, which are determined largely by differences in production processes. An easily recognized example of these distinctions is in the food processing industry, which is made up of subdivisions that produce meat products, preserved fruits and vegetables, bakery items, beverages, and dairy products, among others. Each of these subdivisions requires workers with varying skills and employ unique production techniques. Another example of these distinctions is in public utilities, which employs workers in establishments that provide electricity, sanitary services, water, and natural gas. Working conditions and establishment characteristics often differ widely in each of these smaller subdivisions.

There were nearly 7 million business establishments in the United States in 1997. The average size of these establishments varies widely across industries. Among industry divisions,

manufacturing included many industries having among the highest employment per establishment in 1997. For example, the aerospace, motor vehicle, and steel manufacturing industries each averaged 150 or more employees per establishment.

Most establishments in the wholesale and retail trade, finance, and services industries are small, averaging fewer than 20 employees per establishment. Exceptions are the air transportation industry with 62 employees and educational services with 44. In addition, wide differences within industries can exist. Hospitals, for example, employ an average of 716 employees, while doctor’s offices employ an average of 9. Similarly, despite an average of 14 employees per establishment for all of retail trade, department stores employ an average of 183 people.

Establishments in the United States are predominantly small; 55 percent of all establishments employed fewer than five workers in 1997. The medium to large establishments, however, employ a greater proportion of all workers. For example, establishments that employed 50 or more workers accounted for only 5 percent of all establishments, yet employed 58 percent of all workers. The large establishments—those with more than 500 workers—accounted for only 0.3 percent of all establishments, but employed 20 percent of all workers. Table 1 presents the percent distribution of employment according to establishment size.

Establishment size can play a role in the characteristics of each job. Large establishments generally offer workers greater occupational mobility and advancement potential, whereas small establishments may provide their employees with broader experience by requiring them to assume a wider range of responsibilities. Also, small establishments are distributed throughout the nation; every locality has a few small businesses. Large establishments, in contrast, employ more workers and are less common, but they play a much more prominent role in the economies of the areas in which they are located.

**Table 1. Percent distribution of establishments and employment in all industries by establishment size, 1997**

Establishment size (number of workers)	Establishments	Employment
Total .....	100.0	100.0
1-4 .....	54.5	6.1
5-9 .....	19.6	8.5
10-19 .....	12.4	10.9
20-49 .....	8.3	16.4
50-99 .....	2.8	12.7
100-249 .....	1.7	16.2
250-499 .....	0.4	9.4
500-999 .....	0.2	7.0
1,000 or more .....	0.1	12.7

SOURCE: Department of Commerce, County Business Patterns, 1997

## Working Conditions

Just as the goods and services of each industry are different, working conditions in industries can vary significantly. In some industries, the work setting is quiet, temperature-controlled, and virtually hazard free. Other industries are characterized by noisy, uncomfortable, and sometimes dangerous work environments. Some industries require long workweeks and shift work; in many industries, standard 35-to 40-hour workweeks are common. Still other industries can be seasonal, requiring long hours during busy periods and abbreviated schedules during slower months. These varying conditions usually are determined by production processes, establishment size, and the physical location of work.

One of the most telling indicators of working conditions is an industry's injury and illness rate. Overexertion, being struck by an object, and falls on the same level, were among the most common incidents causing injury or illness. In 1997, approximately 6.1 million nonfatal injuries and illnesses were reported throughout private industry. Among major industry divisions, manufacturing had the highest rate of injury and illness—10.3 cases for every 100 full-time workers—while finance, insurance, and real estate had the lowest rate—2.2 cases. About 6,000 work-related fatalities were reported in 1998; transportation accidents, violent acts, contact with objects and equipment, falls, and exposure to harmful substances or environments were among the most common events resulting in fatal injuries. Table 2 presents industries with the highest and lowest rates of nonfatal injury and illness.

**Table 2. Nonfatal injury and illness rates of selected industries, 1997**

Industry	Cases per 100 full-time employees
<b>All industries</b> .....	7.1
<b>High rates</b>	
Motor vehicle manufacturing .....	25.5
Air transportation .....	16.4
Nursing and personal care facilities .....	16.2
Food processing .....	14.5
Trucking and warehousing .....	10.0
<b>Low rates</b>	
Insurance .....	1.9
Banking .....	1.8
Radio and TV broadcasting .....	1.8
Computer and data processing .....	0.8
Securities and commodities .....	0.7

Work schedules are another important reflection of working conditions, and the operational requirements of each industry lead to large differences in hours worked and part-time versus full-time status. The contrast in an average workweek was notable between retail trade and manufacturing—29.1 hours and 41.7 hours, respectively, in 1998. More than 30 percent of workers in retail trade work part time (1 to 34 hours per week), compared to only 5 percent in manufacturing. Table

3 presents industries having relatively high and low percentages of part-time workers.

**Table 3. Percent of part-time workers in selected industries, 1998**

Industry	Percent part-time
<b>All industries</b> .....	15.9
<b>Many part-time workers</b>	
Apparel and accessory stores .....	38.6
Eating and drinking places .....	38.0
Department stores .....	33.0
Grocery stores .....	32.5
Child-care services .....	29.7
<b>Few part-time workers</b>	
Public utilities .....	3.0
Chemical manufacturing, except drugs .....	2.9
Textile mill products manufacturing .....	2.5
Motor vehicle and equipment manufacturing .....	1.8
Steel manufacturing .....	1.7

The low proportion of part-time workers in some manufacturing industries often reflects the continuity of the production processes and the specificity of skills. Once begun, it is costly to halt these processes; machinery and materials must be tended and moved continuously. For example, the chemical manufacturing industry produces many different chemical products through controlled chemical reactions. These processes require chemical operators to monitor and adjust the flow of materials into and out of the line of production. Production may continue 24 hours a day, 7 days a week under the watchful eyes of chemical operators who work in shifts.

Retail trade and service industries, on the other hand, have seasonal cycles marked by various events, such as school openings or important holidays, that affect the hours worked. During busy times of the year, longer hours are common, whereas slack periods lead to cutbacks and shorter workweeks. Jobs in these industries are generally appealing to students and others who desire flexible, part-time schedules.

## Employment

The number of wage and salary worker jobs in the United States totaled nearly 128 million in 1998, and it is projected to reach almost 148 million by 2008 (See Table 4). In addition to these workers, the U.S. economy also provided employment for nearly 12 million self-employed workers and about 182,000 unpaid family workers.

As shown in table 4, employment is not evenly divided among the various industries. The services major industry division is the largest source of employment, with over 47 million workers, followed by wholesale and retail trade and manufacturing major industry divisions. Among the industries covered in the *Career Guide*, wage and salary employment ranged from 181,000 in cable and other pay television services to 11.2 million in educational services. Three industries—educational services, health services, and eating and drinking places—together accounted for about 30 million jobs, or nearly a quarter of the Nation's employment.

**Table 4. Wage and salary employment in selected industries, 1998 and projected change, 1998 to 2008**

(Employment in thousands)

Industry	1998		2008 Employment	1998-2008	
	Employment	Percent distribution		Employment change	Percent change
<b>All Industries</b> .....	128,008	100.0	147,543	19,535	15.3
<b>Goods-producing industries</b> .....	27,506	21.5	27,951	445	1.6
<b>Agriculture, forestry, and fishing</b> .....	2,159	1.7	2,257	98	4.6
Agricultural services .....	1,005	0.8	1,251	246	24.5
Agricultural production .....	1,106	0.9	968	-138	-12.5
<b>Mining</b> .....	590	0.5	475	-115	-19.4
Oil and gas extraction .....	339	0.3	283	-56	-16.7
Mining and quarrying .....	251	0.2	192	-59	-23.2
<b>Construction</b> .....	5,985	4.7	6,535	550	9.2
<b>Manufacturing</b> .....	18,772	14.7	18,684	-88	-0.5
Electronics manufacturing .....	1,564	1.2	1,701	137	8.8
Food processing .....	1,686	1.3	1,721	35	2.1
Printing and publishing .....	1,564	1.2	1,545	-19	-1.3
Motor vehicle and equipment manufacturing .....	990	0.7	940	-50	-5.0
Chemicals manufacturing, except drugs .....	764	0.6	734	-30	-3.9
Apparel and other textile products manufacturing .....	763	0.6	586	-178	-23.3
Textile mill products manufacturing .....	598	0.5	501	-97	-16.2
Aerospace manufacturing .....	524	0.4	656	132	25.2
Drug manufacturing .....	279	0.2	308	29	10.7
Steel manufacturing .....	232	0.2	177	-55	-23.7
<b>Service-producing industries</b> .....	100,501	78.5	119,590	19,089	19.0
<b>Transportation, communications,     and public utilities</b> .....	6,600	5.2	7,540	940	14.3
Trucking and warehousing .....	1,745	1.4	1,944	199	11.4
Air transportation .....	1,183	0.9	1,400	217	18.3
Telecommunications .....	1,042	0.8	1,285	244	23.4
Public utilities .....	855	0.7	822	-33	-3.8
Radio and television broadcasting .....	247	0.1	253	6	2.5
Cable and other pay TV services .....	181	0.1	230	49	27.0
<b>Wholesale and retail trade</b> .....	29,128	22.8	32,693	3,565	12.2
Eating and drinking places .....	7,760	6.1	9,082	1,322	17.0
Wholesale trade .....	6,831	5.3	7,330	499	7.3
Department, clothing, and variety stores .....	3,872	3.0	4,101	228	5.9
Grocery stores .....	3,066	2.4	3,240	174	5.7
Motor vehicle dealers .....	1,145	0.9	1,277	132	11.6
<b>Finance, insurance, and real estate</b> .....	7,407	5.8	8,367	960	13.0
Insurance .....	2,344	1.8	2,576	233	9.9
Banking .....	2,042	1.6	2,100	58	2.8
Securities and commodities .....	645	0.5	900	255	39.6
<b>Services</b> .....	47,528	37.1	60,445	12,917	27.2
Educational services .....	11,175	8.7	12,885	1,680	15.3
Health services .....	10,829	8.5	13,614	2,785	25.7
Personnel supply services .....	3,230	2.5	4,623	1,393	43.1
Social services .....	2,039	1.6	2,878	839	41.1
Hotels and other lodging places .....	1,776	1.4	2,088	312	17.6
Amusement and recreation services .....	1,601	1.3	2,108	507	31.7
Computer and data processing services .....	1,599	1.2	3,471	1,872	117.1
Management and public relations services .....	1,034	0.8	1,500	466	45.1
Child-care services .....	605	0.5	800	196	32.3
Motion picture production and distribution .....	270	0.2	316	46	16.9
Advertising .....	268	0.2	323	55	20.5
<b>Government</b> .....	9,838	7.7	10,545	707	7.2
State and local government .....	7,152	5.6	7,996	844	11.8
Federal Government .....	1,819	1.4	1,655	-164	-9.0

Although workers of all ages are employed in each industry, certain industries tend to possess workers of distinct age groups. For the reasons mentioned above, retail trade employs a relatively high proportion of younger workers to fill part-time and temporary positions. The manufacturing sector, on the other hand, has a relatively high median age because many jobs in the sector require a number of years to learn and rely on skills that do not easily transfer to other firms. Also, manufacturing employment has been declining, providing fewer opportunities for younger workers to get jobs. As a result, almost one-third of the workers in retail trade were 24 years of age or younger, whereas only 10 percent of workers in manufacturing were 24 or younger. Table 5 contrasts the age distribution of workers in all industries with the distributions in retail trade and manufacturing.

**Table 5. Percent distribution of industry sector employment by age group, 1998**

Age group	All industries	Retail trade	Manufacturing
Total .....	100.0	100.0	100.0
16-24 .....	15.0	32.5	9.9
25-54 .....	72.3	56.9	78.2
55 and older .....	12.7	10.6	11.8

Employment in some industries is concentrated in one region of the country, and job opportunities in these industries should be best in the States in which their establishments are located. Such industries are often located near a source of raw materials upon which the industries rely. For example, oil and gas extraction jobs are concentrated in Texas, Louisiana, and Oklahoma; many textile mill products manufacturing jobs are found in North Carolina, Georgia, and South Carolina; and a significant proportion of motor vehicle and equipment manufacturing jobs are located in Michigan. On the other hand, some industries—such as grocery stores and educational services—have jobs distributed throughout the Nation, reflecting population density in different areas.

### Occupations in the Industry

As mentioned above, the occupations found in each industry depend on the types of services provided or goods produced. For example, construction companies require skilled trades workers to build and renovate buildings, so these companies employ a large number of carpenters, electricians, plumbers, painters, and sheet metal workers. Other occupations common to the construction sector include construction equipment operators and mechanics, installers, and repairers. Retail trade, on the other hand, displays and sells manufactured goods to consumers, so this sector hires numerous sales clerks and other workers, including nearly 5 out of 6 cashiers. Table 6 shows the major industry divisions and the occupational groups which predominate in the division.

**Table 6. Industry divisions and largest occupational concentration, 1998**

Industry division	Largest occupational group	Percent of wage and salary jobs
Agriculture, forestry, and fishing	Agriculture and related	78.8
Mining	Precision production	44.0
Construction	Precision production	55.5
Manufacturing	Operators, fabricators, and laborers	45.0
Transportation, communications, and public utilities	Operators, fabricators, and laborers	33.0
Wholesale and retail trade	Marketing and sales	32.7
Finance, insurance, and real estate	Administrative support	44.8
Services	Professional specialty	28.4
Government	Administrative support	26.1

The Nation's occupational distribution clearly is influenced by its industrial structure, yet there are many occupations, such as general manager or secretary, which are found in all industries. In fact, some of the largest occupations in the U.S. economy are dispersed across many industries. Because nearly every industry relies on administrative support, for example, this occupational group is the largest in the Nation (see table 7). Other large occupational groups include service occupations, professional specialty workers, and operators, fabricators, and laborers.

**Table 7. Total employment in broad occupational groups, 1998 and projected change, 1998-2008**

(Employment in thousands)

Occupational group	1998 Employment	1998-2008 Percent change
Total, all occupations .....	140,514	14.4
Executive, administrative, and managerial .....	14,770	16.4
Professional specialty .....	19,802	27.0
Technicians and related support .....	4,949	22.2
Marketing and sales .....	15,341	14.9
Administrative support, including clerical .....	24,461	9.0
Services .....	22,548	17.1
Agriculture, forestry, fishing, and related .....	4,435	1.6
Precision production, craft, and repair .....	15,619	8.0
Operators, fabricators, and laborers .....	18,588	9.4

**Table 8. Percent distribution of highest grade completed or degree received by industry division, 1998**

Industry division	Bachelor's degree or higher	Some college or associate degree	High school graduate of equivalent	Less than 12 years or no diploma
Agriculture, forestry, and fishing .....	13	20	34	33
Mining .....	24	22	39	15
Construction .....	10	25	44	21
Manufacturing .....	21	24	40	15
Transportation, communications, and public utilities .....	20	33	38	9
Wholesale and retail trade .....	14	29	37	20
Finance, insurance, and real estate .....	37	32	27	4
Services .....	39	24	28	9
Government, public administration .....	37	36	25	2

### Training and Advancement

Workers prepare for employment in many ways, but the most fundamental form of job training in the United States is a high school education. Fully 87 percent of the Nation's workforce possessed a high school diploma or its equivalent in 1998. As the premium placed on education in today's economy increases, workers are responding by pursuing additional training. In 1998, 28 percent of the Nation's workforce had some college or an associate's degree, while an additional 27 percent continued in their studies and attained a bachelor's degree or higher. In addition to these types of formal education, other sources of qualifying training include formal company training, informal on-the-job training, correspondence courses, the Armed Forces, and friends, relatives, and other nonwork-related training.

The unique combination of training required to succeed in each industry is determined largely by the industry's occupational composition. For example, machine operators in manufacturing generally need little formal education after high school, but sometimes complete considerable on-the-job training. These requirements by major industry division are clearly demonstrated in table 8. Workers with no more than a high school diploma comprised about 67 percent of all workers in agriculture, forestry, and fishing; 65 percent in construction; 55 percent in manufacturing; and 57 percent in wholesale and retail trade. On the other hand, workers who had acquired at least some training at the college level comprised 73 percent of all workers in government; 69 percent in finance, insurance, and real estate; and 63 percent in services. Tables 9 and 10 provide further illustration of how greatly industries vary in their training requirements, which show industries having the highest percentages of college graduates and workers without education beyond high school.

**Table 9. Industries with the highest percentage of workers who have a bachelor's degree or higher, 1998**

Industry	Percent
Management and public relations services .....	68.6
Securities and commodities .....	64.9
Elementary and secondary schools .....	62.8
Legal services .....	62.5
Accounting and auditing services .....	62.3

Education and training are also important factors in the variety of advancement paths found in different industries. In general, workers who complete additional on-the-job training or education help their chances of being promoted. In much of the manufacturing sector, for example, production workers who receive training in management and computer skills increase their likelihood of being promoted to supervisors. Other factors which may figure prominently in the industries covered in the *Career Guide* include the size of the establishment or company, institutionalized career tracks, and the skills and aptitude of each worker. Each industry has some unique advancement paths, so persons who seek jobs in particular industries should be aware of how these paths may later shape their careers.

**Table 10. Industries with the highest percentage of workers who have 12 years or less of schooling or no diploma, 1998**

Industry	Percent
Meat products processing .....	79.5
Apparel and other finished textile products manufacturing .....	74.4
Private households .....	74.4
Lumber and wood products manufacturing .....	74.2
Services to dwellings and other buildings .....	73.2
Agricultural production, crops .....	73.1

## Earnings

Like other characteristics, earnings differ from industry to industry, the result of a highly complicated process that relies on a number of factors. For example, earnings may vary due to the occupations in the industry, average hours worked, geographical location, industry profits, union affiliation, and educational requirements. In general, wages are highest in metropolitan areas to compensate for the higher cost of living. And, as would be expected, industries that employ relatively few unskilled minimum-wage or part-time workers tend to have higher earnings.

A good illustration of these differences is shown by the earnings of production and nonsupervisory workers in coal mining, which averaged \$858 a week in 1998, and those in eating and drinking places, where the weekly average was \$162. These differences are so large because the coal mining industry employs a relatively highly-skilled, highly-unionized workforce, while eating and drinking places employ many relatively lower-skilled, part-time workers, few of whom belong to unions. In addition, many workers in eating and drinking places are able to supplement their low wages with money they receive as tips, which are not included in the industry wages data. Table 11 highlights the industries with the highest and lowest average weekly earnings. Because these data exclude supervisors, they generally are lower than the average earnings for all workers in a given industry.

**Table 11. Average weekly earnings of nongovernment production or nonsupervisory workers in selected industries, 1998**

Industry	Earnings
<b>All industries</b> .....	\$442
<b>Industries with high earnings</b>	
Coal mining .....	858
Railroad transportation .....	845
Aerospace manufacturing .....	845
Public utilities .....	843
Steel manufacturing .....	822
Computer and data processing services .....	815
Engineering services .....	810
Securities and commodities .....	800
Motion picture production and services .....	789
Motor vehicle production .....	780
<b>Industries with low earnings</b>	
Help supply services .....	330
Nursing and personal care services .....	318
Apparel and other textile products manufacturing .....	318
Hotels and other lodging places .....	279
Grocery stores .....	276
Amusement and recreation services .....	258
General merchandise stores .....	256
Child care services .....	237
Apparel and accessory stores .....	226
Eating and drinking places .....	162

Employee benefits, once a minor addition to wages and salaries, continue to grow in diversity and cost. In addition to traditional benefits—including paid vacations, life and health insurance, and pensions—many employers now offer various benefits to accommodate the needs of a changing labor force. Such benefits are child care, employee assistance programs

that provide counseling for personal problems, and wellness programs that encourage exercise, stress management, and self-improvement. Benefits vary among occupational groups, full and part-time workers, public and private sector workers, regions, unionized and nonunionized workers, and small and large establishments. Data indicate that full-time workers and those in medium-size and large establishments—those with 100 or more workers—receive better benefits than part-time workers and those in smaller establishments.

**Table 12. Percent of workers who are union members or covered by union contracts by industry division, 1998**

Industry division	Union members or covered by union contracts
Total, all industries .....	15.4
Government, public administration .....	37.5
Transportation, communications, and public utilities .....	33.7
Construction .....	19.8
Manufacturing .....	16.8
Services .....	15.4
Mining .....	13.6
Wholesale and retail trade .....	5.8
Finance, insurance, and real estate .....	3.4
Agriculture, forestry, and fishing .....	2.3

Union affiliation may also play a role in earnings and benefits. In 1998, about 15 percent of workers throughout the Nation were union members or covered by union contracts. As table 12 demonstrates, union affiliation of workers varies widely by industry. Over a third of the workers in government and transportation, communications, and public utilities are union members or are covered by union contracts, compared to less than 4 percent in finance, insurance, and real estate and agriculture, forestry, and fishing.

## Outlook

Total employment in the United States is projected to increase about 15 percent over the 1998-2008 period. Employment growth, however, is only one source of job openings; the total number of openings provided by any industry depends on its current employment level, its growth rate, and its need to replace workers who leave their jobs. Throughout the economy, in fact, replacement needs will create more job openings than employment growth. Employment size is a major determinant of job openings—larger industries generally provide more openings. The occupational composition of an industry is another factor. Industries with a high concentration of professional, technical, and other jobs that require more formal education—occupations in which workers tend to leave their jobs less frequently—generally have fewer openings resulting from replacement needs. On the other hand, industries with a high concentration of service, laborer, and other jobs that require little formal education and have lower wages generally have more replacement openings because these workers are more likely to leave their occupations.

Employment growth is determined largely by changes in the demand for the goods and services produced by an industry, worker productivity, and foreign competition. Each industry is

affected by a different set of variables that impacts the number and composition of jobs that will be available. Even within an industry, employment in different occupations may grow at different rates. For example, changes in technology, production methods, and business practices in an industry might eliminate some jobs, while creating others. Some industries may be growing rapidly overall, yet opportunities for workers in occupations that are adversely affected by technological change could be stagnant. Similarly, employment of some occupations may be declining in the economy as a whole, yet may be increasing in a rapidly growing industry.

As shown in table 4, employment growth rates over the next decade will vary widely among industries. Employment in goods-producing industries will increase slightly, as growth in construction and agriculture, forestry, and fishing is expected to be offset by declining employment in mining and manufacturing. Growth in construction employment will be driven by new factory construction as existing facilities are modernized; by new school construction, reflecting growth in the school-age population; and by infrastructure improvements, such as road and bridge construction. Overall employment in agriculture, forestry, and fishing will grow more slowly than average, with almost all new jobs occurring in the rapidly growing agricultural services industry—which includes landscaping, farm management, veterinary, soil preparation, and crop services. Employment in mining is expected to decline, due to the spread of labor-saving technology and increasing reliance on foreign sources of energy. Manufacturing employment also will decline slightly, as improvements in production technology and rising imports eliminate many production occupations. Apparel manufacturing is projected to lose about 178,000 jobs over the 1998-2008 period—more than any other manufacturing industry—due primarily to increasing imports. Some manufacturing industries with strong domestic markets and export potential, however, are expected to experience increases in employment. The drug manufacturing and aerospace manufacturing industries are two examples. Sales of drugs are expected to increase with the rise in the population, particularly the elderly, and the availability of new drugs on the market. An increase in air traffic, coupled with the need to replace aging aircraft will generate strong sales for commercial aircraft. Both industries have large export markets.

Growth in overall employment will result primarily from growth in service-producing industries over the 1998-2008 period, almost all of which are expected to witness increasing employment. Rising employment in these industries will be driven by services industries—the largest and fastest growing major industry sector—which is projected to provide more than 2 out of 3 new jobs across the Nation. Health, education, and business services will account for almost 9 million of these new jobs. In addition, employment in the Nation's fastest growing industry—computer and data processing services—is expected to more than double, adding another 1.8 million jobs. Job growth in the services sector will result from overall population growth, the rise in the elderly and school age population, and the trend toward contracting out for computer, personnel, and other business services.

Wholesale and retail trade is expected to add an additional 3.6 million jobs over the coming decade. Nearly 500,000 of

these jobs will arise in wholesale trade, driven mostly by growth in trade and the overall economy. Retail trade is expected to add 3 million jobs over the 1998-2008 period, resulting largely from a greater population and increased personal income levels. Although most retail stores are expected to add employees, nonstore retailers will experience the fastest growth rate—55 percent—as electronic commerce and mail order sales account for an increasing portion of retail sales. Eating and drinking places will have the largest number of openings, over 1.3 million.

Employment in transportation, communications, and public utilities is projected to increase by nearly 940,000 new jobs. The telecommunications industry will have the biggest increase—244,000 jobs. Strong demand for new telecommunications services, such as Internet and wireless communications, will lead to an expansion of the telecommunications infrastructure and provide strong employment growth. Trucking and air transportation are expected to generate over 400,000 jobs. Trucking industry growth will be fueled by growth in the volume of goods that need to be shipped as the economy expands. Air transportation will expand as consumer and business demand increases, reflecting a rising population and increased business activity. Finally, while radio and television broadcasting will show little employment growth due to consolidations in the industry, cable and other pay television companies will increase by 27 percent as they upgrade their systems to deliver a wider array of communication and programming services.

Overall employment growth in finance, insurance, and real estate is expected to be around 13 percent, with close to 1 million jobs added by 2008. Securities and commodities will be the fastest growing industry in this sector, adding over 250,000 jobs. A growing interest in investing and the rising popularity of 401(k) and other pension plans are fueling increases in this industry. In contrast, the largest industry in this sector, banking, will grow by only 2.8 percent, or 58,000 jobs, as technological advances and the increasing use of electronic banking reduce the need for large administrative support staffs. Nondepository institutions—including personal and business credit institutions, as well as mortgage banks—are expected to grow at a rapid rate, and insurance will also expand, increasing by 232,000 jobs.

All 707,000 new government jobs are expected to arise in State and local government, reflecting growth in the population and its demand for public services. In contrast, the Federal Government is expected to lose more than 160,000 jobs over the 1998-2008 period, as efforts continue to cut costs by contracting out services and giving States more responsibility for administering Federally funded programs.

In sum, recent changes in the economy are having far-reaching and complex effects on employment in each of the industries covered in the *Career Guide*. Jobseekers should be aware of these changes, keeping alert for developments that can affect job opportunities in industries and the variety of occupations which are found in each industry. For more detailed information on specific occupations, consult the 2000-2001 Edition of the *Occupational Outlook Handbook*, which provides information on 250 occupations.